

## SWP Water Quality Summary

June 8 to July 09, 2010

**Electrical Conductivity:** EC decreased at all locations from June 8 to July 09, 2010.

Concentrations ranged from 194  $\mu\text{S}/\text{cm}$  to 462  $\mu\text{S}/\text{cm}$  (116 mg/L to 277 mg/L), which is below the Article 19 Monthly Average Objective of 440 mg/L (733  $\mu\text{S}/\text{cm}$ ). As of July 9, 2010, Check 29 had the highest concentration of 351  $\mu\text{S}/\text{cm}$  (210 mg/L) with a -20% change, while HBP had the lowest concentration of 194  $\mu\text{S}/\text{cm}$  (116 mg/L) with a -38% change.

**Bromide\*:** Concentrations exceeded the California Bay-Delta Authority (CBDA) Objective of 0.05 mg/L at Check 29 and Check 41 and ranged from 0.05 mg/L to 0.20 mg/L. As of July 09, 2010, HBP, Barker Slough and Vallecitos had the lowest concentration of 0.05 mg/L, while the highest concentration of 0.13 mg/L occurred at Check 29.

\* Bromide concentrations are calculated values using linear regression equations using EC concentrations and are not as accurate as bromide concentrations from laboratory analysis.

**Turbidity:** Turbidity levels increased at HBP, Barker Slough and Vallecitos, but decreased at Check 29 and Check 41. Turbidity ranged from 5.6 NTU to 68.2 NTU this month. On July 8, 2010, the lowest level of 5.6 NTU occurred at Check 41, while the highest level of 68.2 NTU occurred at Barker Slough. The 32-day average turbidity level at HBP on July 9 was 26.7 NTU with a 13% change.

**Dissolved Organic Carbon (DOC):** Concentrations decreased at HBP, but increased at Check 13 and Edmonston from June 8 to July 9, 2010. DOC 32-day average concentrations were 2.8 mg/L at HBP, 3.4 mg/L at Check 13 and 3.2 mg/L at Edmonston. As of July 9, 2010, HBP had the highest change in concentration at -19%.

**Taste and Odor Compounds:** MIB and geosmin concentrations in the SWP ranged from non-detect to 3 ng/L at Clifton Court Inlet, HBP, South Bay Aqueduct at Del Valle Check 7, O'Neill Forebay Outlet (Check 13), Check 41, Castaic Lake, Lake Perris and Silverwood Lake.

Ground water pump-ins to the California Aqueduct from June 8 to July 9, 2010 totaled 23,095AF. The break down of the total volume was:

- Arvin Edison Water Storage District = 277 AF
- Kern Water Bank Authority (operates the Kern Water Bank Canal) = 5,724 AF
- Kern County Water Agency (operates the Cross Valley Canal) = 2,565 AF
- Semitropic (2&3) Water Storage District = 14,529AF
- Wheeler Ridge Maricopa Water Storage District = 0 AF.

*As of July 09, 2010, no data was available for Devil Canyon due to maintenance driven station shut down.*

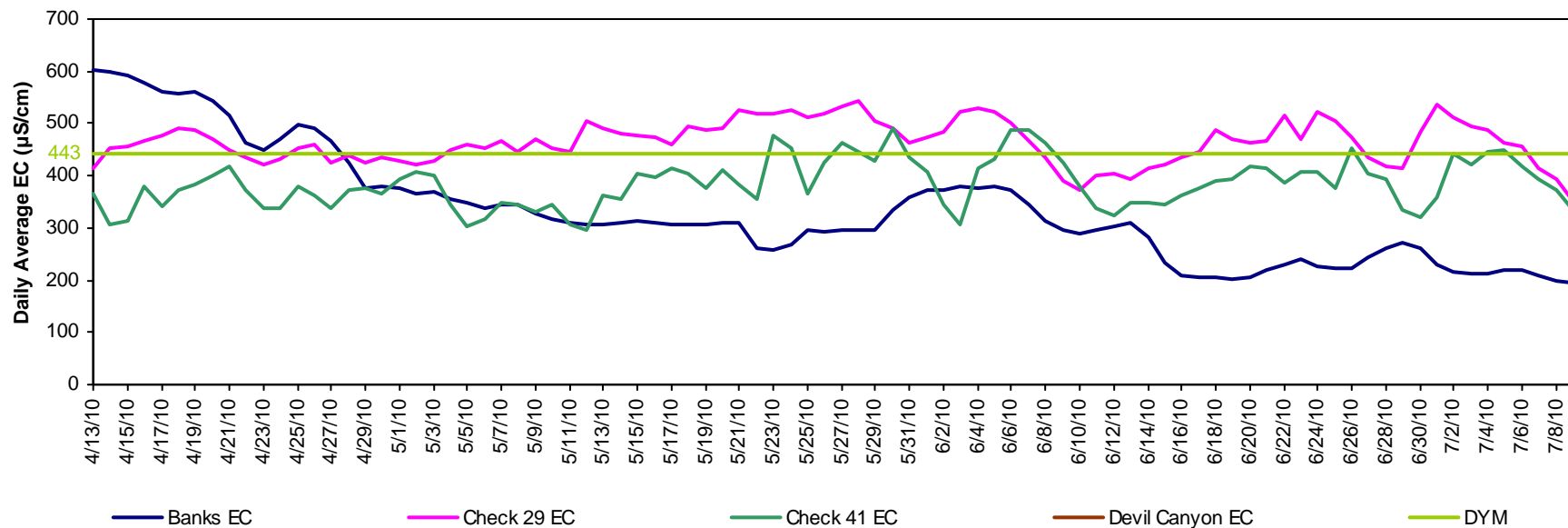
**Note:**

The intent of the monthly water quality (WQ) summary is to acquaint state water contractors, scientists and interested parties with the status of water quality in the State Water Project (SWP). Your comments, questions and suggestions are welcome and should be directed to Cindy Garcia at 916-653-7213, or Austine Eke at 916-653-7227. To view WQ data from the automated stations along the SWP, visit:

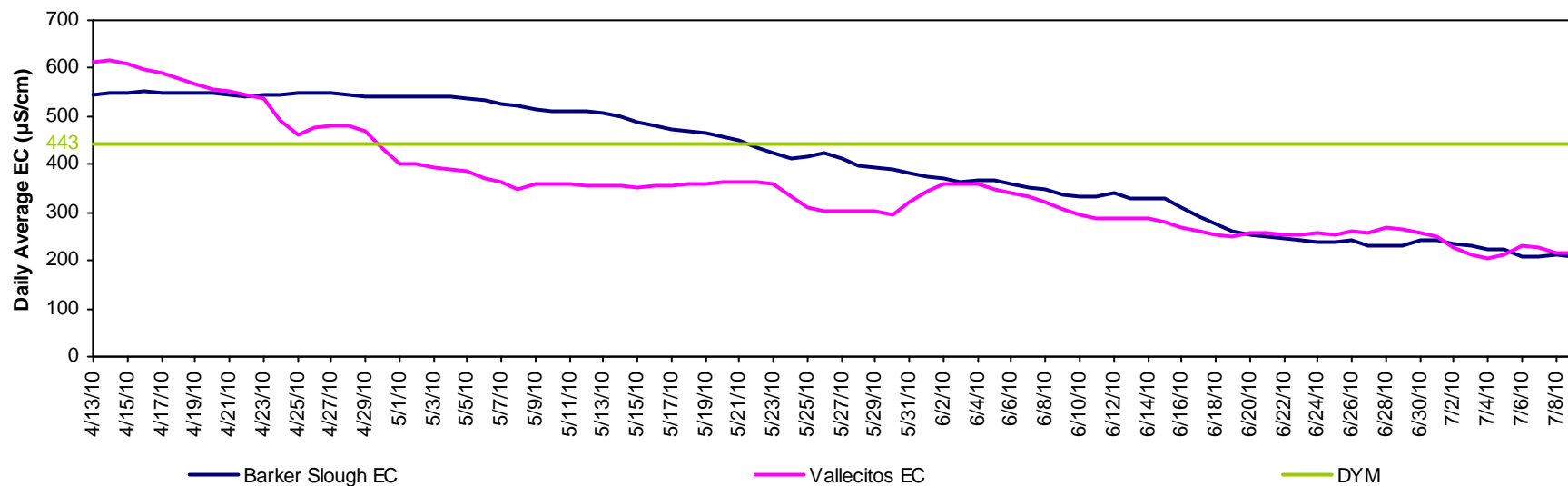
[http://www.water.ca.gov/swp/waterquality/AutostationData/Autostation\\_map.cfm](http://www.water.ca.gov/swp/waterquality/AutostationData/Autostation_map.cfm), and click on a station name on the map to link to the station's data on the California Data Exchange Center (CDEC) website.

To view the Edmonston daily AF pumping data, visit: [www.water.ca.gov](http://www.water.ca.gov). Click on the "State Water Project" tab, and click on the "Operations Control" link. Look under the "Project-Wide Operations" header for the "Dispatcher's Daily Water Report."

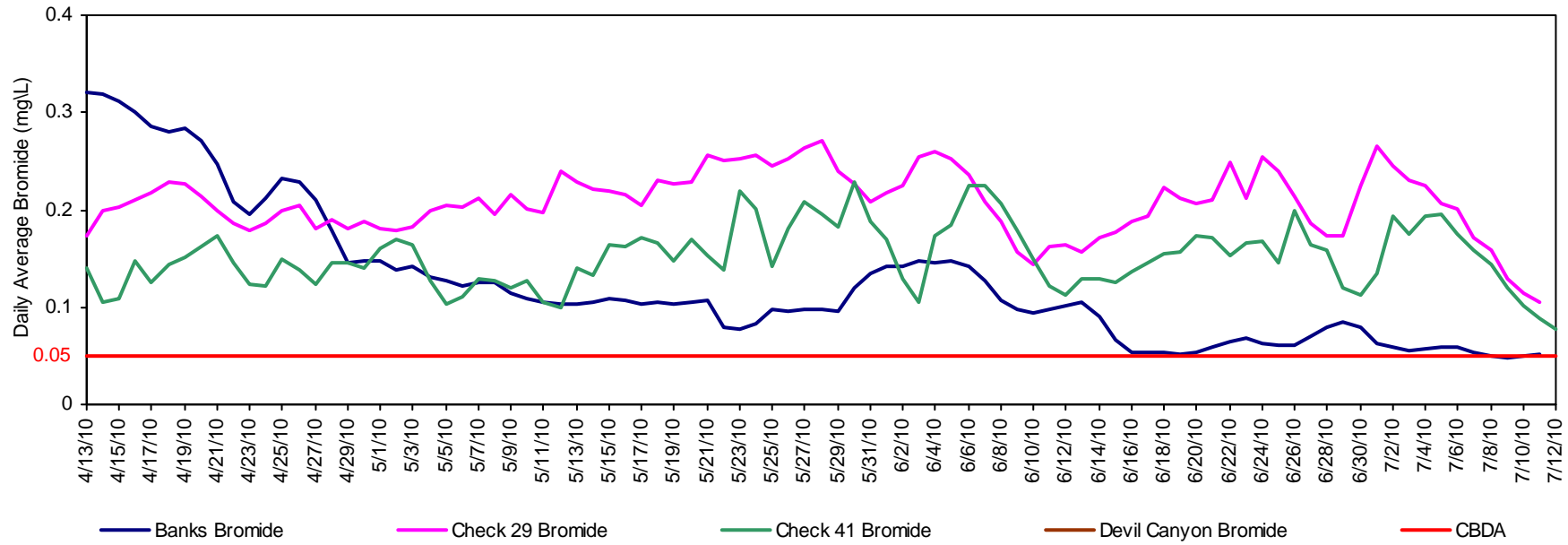
## California Aqueduct - Electrical Conductivity



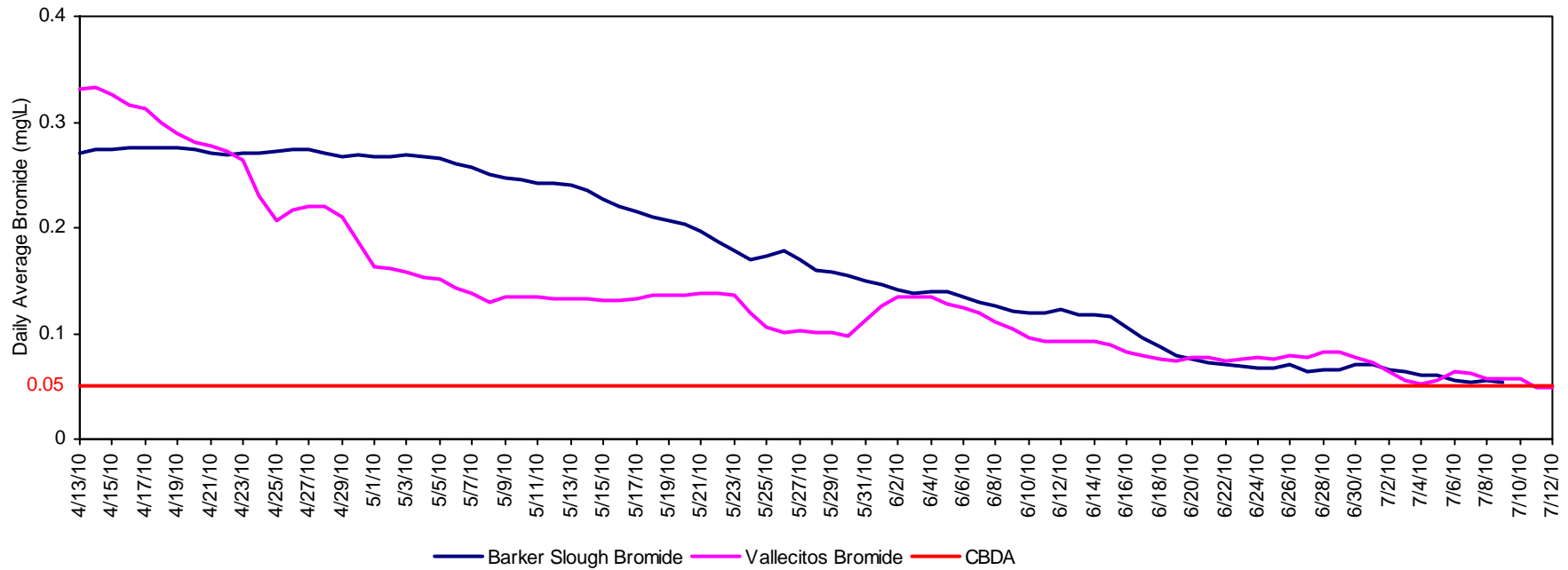
## North and South Bay Aqueduct - Electrical Conductivity



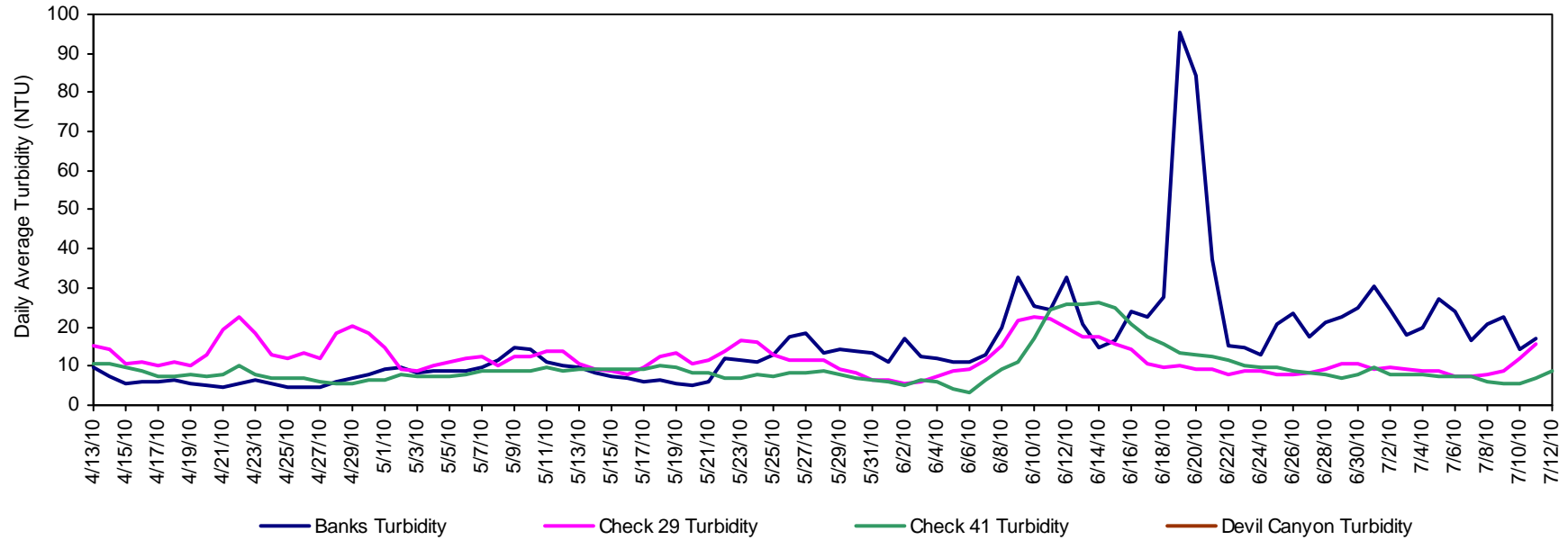
California Aqueduct - Calculated Bromide



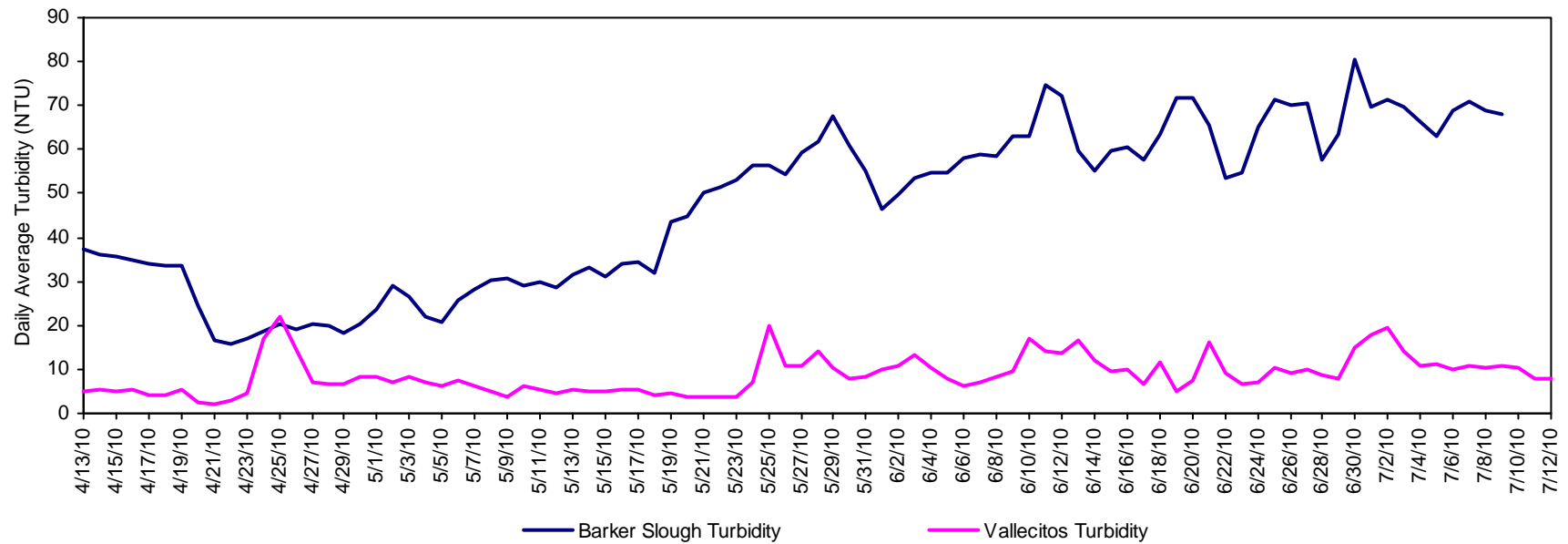
North and South Bay Aqueduct - Calculated Bromide



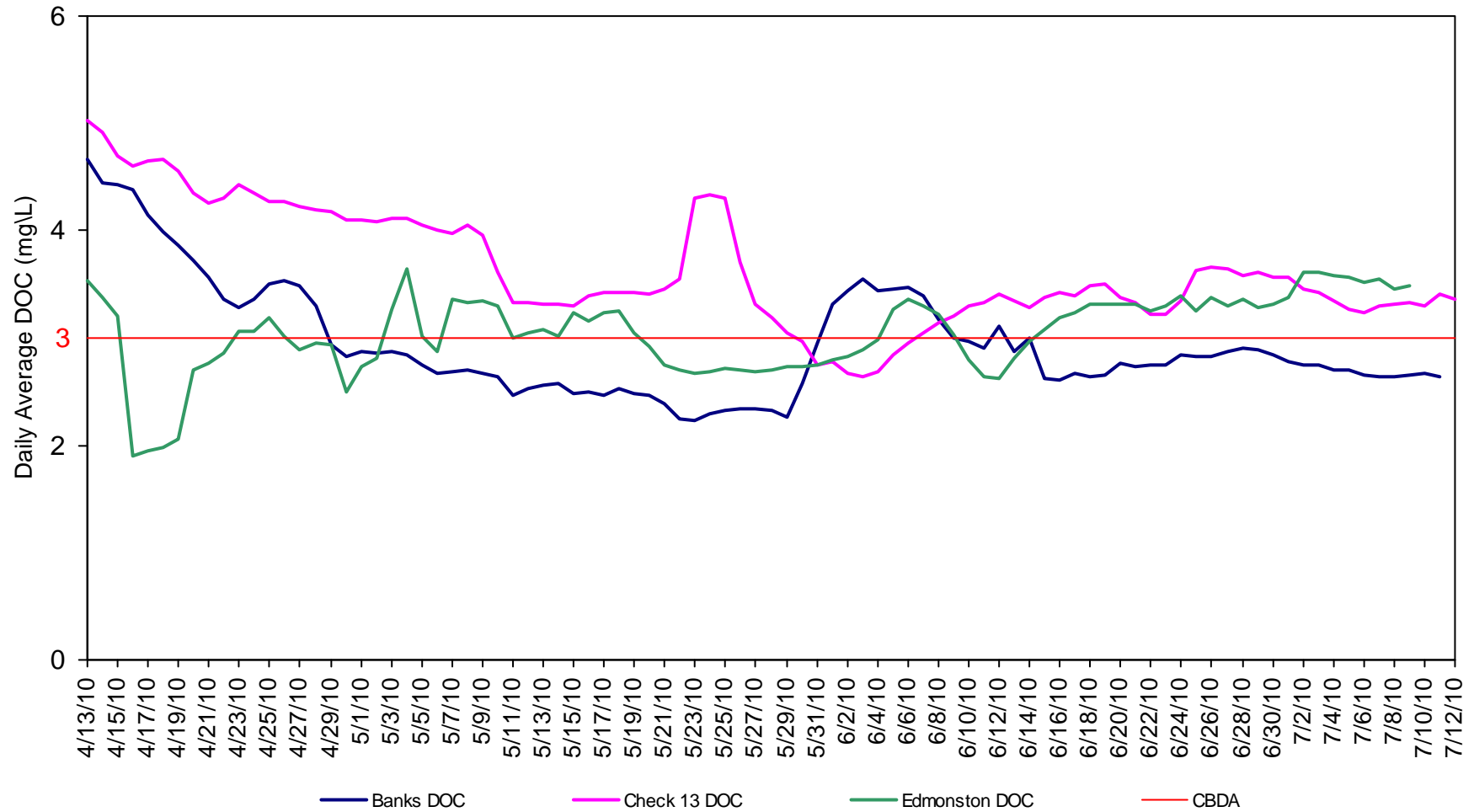
### California Aqueduct - Turbidity



### North and South Bay Aqueduct - Turbidity



# California Aqueduct Calculated Dissolved Organic Carbon



## SWP Water Quality Report

### DWR Operations & Maintenance Water Quality Automated Station Data from June 8 to July 9, 2010

Automated sampling stations provide real time data by continuously measuring water quality conditions in the California Aqueduct.

| Water Quality Parameters | Objective | Range                     | Harvey O. Banks PP<br>KA000331 | Check 29<br>KA024454                   | Check 41<br>KA030341                        | Devil Canyon<br>KA041288 | NBA at Barker Slough<br>KG000000 | Vallecitos<br>KB002250 | Check 13 O'Neill Forebay Outlet<br>KA007089 | Edmonston PP Milepost 293.45 |
|--------------------------|-----------|---------------------------|--------------------------------|--|---|--------------------------|----------------------------------|------------------------|---|------------------------------|
| EC (µS/cm)               | 733**     | 6/08/2010                 | 313                            | 437                                    | 462   |                          | 346                              | 321                    |   |                              |
|                          |           | 7/09/2010                 | 194                            | 351                                    | 336   | NO                       | 208                              | 214                    |   |                              |
|                          |           | % change                  | -38                            | -20                                    | -27   | DATA                     | -40                              | -33                    |   |                              |
|                          |           | 32-day Avg                | 239                            | 448                                    | 389   |                          | 264                              | 256                    |   |                              |
| Bromide (mg/L)           | 0.05*     | 6/08/2010                 | 0.11                           | 0.19                                   | 0.20  | NO                       | 0.13                             | 0.11                   |   |                              |
|                          |           | 7/09/2010                 | 0.05                           | 0.13                                   | 0.12  | DATA                     | 0.05                             | 0.05                   |   |                              |
|                          |           | % change                  | -54                            | -31                                    | -40   |                          | -61                              | -54                    |   |                              |
|                          |           | 32-day Avg                | 0.07                           | 0.20                                   | 0.15  | NO                       | 0.08                             | 0.08                   |   |                              |
| Turbidity (NTU)          |           | 6/08/2010                 | 20                             | 15.2                                   | 9.2   | DATA                     | 58.6                             | 8.2                    |   |                              |
|                          |           | 7/09/2010                 | 22.5                           | 9.0                                    | 5.6   |                          | 68.2                             | 10.9                   |   |                              |
|                          |           | % change                  | 13                             | -41                                    | -39   | NO                       | 16.4                             | 33                     |   |                              |
|                          |           | 32-day Avg                | 26.7                           | 11.6                                   | 12.6  | DATA                     | 65.6                             | 11.2                   |   |                              |
| DOC (mg/L)               | 3.0*      | 6/08/2010                 | 3.2                            |  |   |                          |                                  |                        | 3.1   | 3.2                          |
|                          |           | 7/09/2010                 | 2.6                            |  |   |                          |                                  |                        | 3.3   | 3.5                          |
|                          |           | % change                  | -19                            |  |   |                          |                                  |                        | 6   | 9                            |
|                          |           | 32-day Avg                | 2.8                            |  |   |                          |                                  |                        | 3.4   | 3.2                          |
|                          |           |                           |                                |  |   |                          |                                  |                        |   |                              |
| Taste & Odor Parameters  | Range     | Clifton Court<br>KA000000 | Harvey O. Banks PP<br>KA000331 | Lake Del Valle,<br>Check 7<br>KB001632 | Check 13 O'Neill Forebay Outlet<br>KA007089 | Check 41<br>KA030341     | Check 66<br>KA040341             | Castaic Lake           | Lake Perris                                 | Silverwood Lake              |
| MIB (ng/L)               | 6/1/2010  | ND                        | ND to 1                        | ND to 1                                | ND to 3                                     | ND                       | No Data                          | ND                     | 1 to 2                                      | ND to 1                      |
| Geosmin (ng/L)           | 6/30/2010 | 2 to 3                    | 1 to 2                         | ND to 2                                | ND  | ND                       | No Data                          | 3                      | ND  | ND to 2                      |

\*CBDA Objective; \*\*Article 19 Monthly Average (converted from 440 mg/L to 733µS/cm); ND = Non-detect.